

*Images in Nephrology*  
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## Unusual abdominal masses

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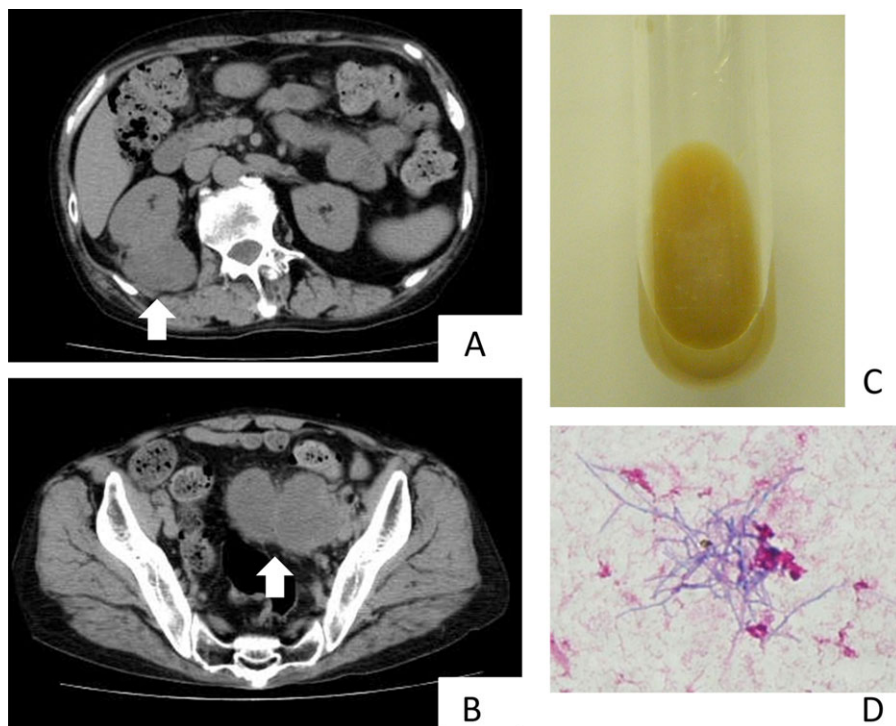
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A 66-year-old afebrile man presented with a 10-day history of general fatigue. He had a history of autoimmune pancreatitis and tubulointerstitial nephritis diagnosed from a kidney biopsy of the left kidney. He had been treated with oral glucocorticoids (prednisolone 25 mg/day) for 3 months. He had normal hepatic function, renal insufficiency (creatinine 122  $\mu\text{mol/L}$ ) and a leucocyte concentration of  $31.4 \times 10^9/\text{L}$  with predominant neutrophils. There were no abdominal symptoms. An emergency computed tomography (CT) scan

was performed to determine the cause of the inflammation. The CT scan revealed a large solid mass in the pelvis and a solid mass in the right retroperitoneal space (Figure 1A and B, indicated by arrows). Gram staining of the grey fluid aspirated from the right retroperitoneal mass (Figure 1C) revealed positive branching rods suggestive of *Actinomyces* (Figure 1D). We cultured the organism and identified *Actinomyces*. Intravenous cefotaxime was started, as our patient's bacterium was ampicillin resistant, and treatment was continued for



**Fig. 1.** (A,B) The CT scan revealed a large solid mass in the pelvis and a solid mass in the right retroperitoneal space (indicated by arrows). (C) Grey fluid was aspirated from the right retroperitoneal mass. (D) Gram staining of the fluid aspirated from the right retroperitoneal mass revealed positive branching rods suggestive of *Actinomyces*.

4 weeks. The patient was discharged on oral minocycline and amoxicillin/clavulanic acid. The original extensive abnormalities had vanished on CT scans 5 months after starting the antibiotic regimen. *Actinomyces* species are susceptible to most antibiotics. The general recommendation is to start treatment with intravenous penicillin G ( $2 \times 10^6$  IU/day) for 4 weeks followed by oral penicillin V (2–4 g/day) for 2–12 months [1]. Clindamycin or tetracycline can be administered with good outcomes when patients are penicillin intolerant [2]. Few case reports have described treating actinomycosis with third-generation cephalosporins [3, 4]. As our patient's bacterium was ampicillin resistant and fully sensitive except to ampicillin, his actinomycosis was treated, and cured, with cefotaxime.

In conclusion, abdominal actinomycosis should be considered in the differential diagnosis when an unusual mass presents on abdominal CT.

*Conflict of interest statement.* None declared.

## References

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